

# Food for thought....



"Everything's changed except the way we think"

Albert Einstein

Fixed ideas often create a grand illusion of safety and permanence in an ever-changing and challenging world.



# CURRENT WORKFORCE DEMANDS...

## Where are we today?



- Workforce needs are reversed
- Extremely competitive global economy
- Employees required to acquire and interpret information, add value, innovate
- Low-skill/high wage jobs are decreasing
- Continuous education is now a basic requirement for success
- The bar has been raised from universal attendance to universal student achievement

# Council on Foreign Relations: Task Force Report No. 68



• In the mid-twentieth century, it was possible to build a meaningful career without completing high school. Today, this is not the case: the gaps in income and achievement between those with and those without college degrees are large and growing, as are the educational opportunities available to the children of parents with and without education.

- Economists and employers predict that in the coming years, a growing number of U.S. citizens will face unemployment because of disparities between the workforce's education and skills and those needed by employers.
  - Joel I. Klein and Condoleezza Rice, March, 2012

# Council on Foreign Relations: Task Force Report No. 68



# Most young people do not qualify for military service.

A recent study on military readiness found that <u>75 percent</u> of U.S. citizens between the ages of seventeen and twenty-four are not qualified to join the military because they are physically unfit, have criminal records, or have inadequate levels of education.

The 25 percent of students who drop out of high school are unqualified to serve, as are the approximately 30 percent of high school graduates who do graduate but do not know enough math, science, and English to perform well on the mandatory Armed Services Vocational Aptitude Battery.

# Change in Organizations



#### Industrial

- Large pyramids
- Producer centered
- Departments
- Hierarchy
- Tight structure
- Rules and regulations
- Assigned procedures

#### **Post-industrial**

- Smaller companies
- Client centered
- Project teams
- Flat
- Loose and fluid
- Fit-for-purpose acts
- Improvised actions

## **Working Modes**



#### **Industrial**

- Division of labor
- Individual tasks
- Specialist duties
- Administrative links
- Credential based appointments
- Appraisal by senior staff

#### **Post-Industrial**

- Total solutions
- Team work
- Integrated expertise
- Human interactions
- On-demand just-in-time learning
- 360 degree appraisal

Kai-ming Cheng (2007) "Education for All, but for What?"
•Chair Professor of Education and Senior Advisor to the Vice Chancellor, The University of Hong Kong

## What has changed?



- Employers are seeking workers who are prepared to:
  - acquire new skills quickly
  - work with less supervision
  - identify sophisticated problems and make crucial decisions

 "Employers are seeking employees skilled in problem solving, listening, negotiating, and knowing how to learn."

Jerry Yaffe; Public Personnel Management, Vol. 21

# A Survey of Workplace Requirements...



- Ability to communicate effectively
- Ability to work as a team member
- Flexible human relations
- Preparedness to face changes and challenges
- Preparedness to solve problems
- Willingness to take risks
- Capacity in analysis and conceptualization
- Capacity and willingness to learn new things
- Ability to question, to query, to challenge, and to innovate
- Willingness and capacity to assume personal responsibility
- Capacity for self-reflection and self-management

### **Trends in Workforce**

- 40 years ago 72% of jobs were held by people with a high school diploma or less
- In 2018 38% of jobs will be available to high school graduates
- Over 4.4 million jobs requiring only basic literacy skills are gone
- 21<sup>st</sup> century jobs will require information processing skills
- Fundamental shift from production to information management
- Information and technology skills are identified as 2 essential competencies for employment



# PUBLIC EDUCATION'S RESPONSE...

# Public Education's Response: Retooling the System



College and Career Ready Standards

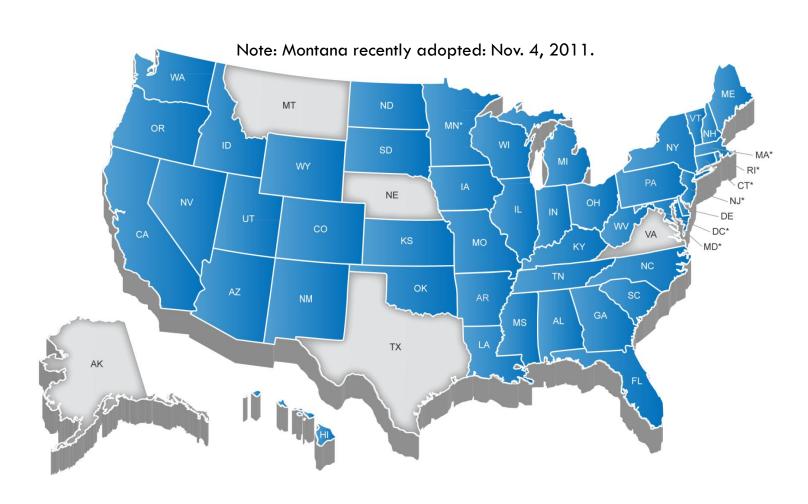
 Integration/focus on Science, Technology, Engineering and Mathematics (STEM)

 Focus and coherence of standards – moving away from "a mile wide, inch deep" approach

Collaboration to provide the best for <u>all</u> students.

# 46 States + DC Have Adopted the Common Core State Standards





## **Critical Message**



- The creation of the common core standards was a <u>state-led effort</u> coordinated by the National Governor's Association (NGA) and the Council of Chief State School Officers (CCSSO).
- The purpose of the new standards is to provide a <u>consistent set</u> of English Language Arts (ELA) and Mathematics <u>expectations</u> that prepare <u>all students</u> for college and career options.
- The standards are designed to ensure that our students remain <u>competitive</u> in the global market of the 21<sup>st</sup> century.
- The 2010 Arizona Academic Standards <u>include the Common Core</u> <u>standards plus Arizona additions</u>. Arizona's adoption of the Common Core standards ensures a more seamless education for high mobility students since grade level standards and expectations are consistent across 46 participating states.

# What is College and Career Readiness?



College and career readiness is the acquisition of the knowledge and skills a student needs to enroll and succeed in credit-bearing, first year courses at a postsecondary institution (such as a two or four year college, trade school, or technical school) without the need for remediation.

-- ACT definition, adopted by Common Core

# Arizona The Work is Underway



- Rollout of Arizona Standards in ELA and Mathematics
- Regional Centers will Support Transition Work, Communication, and Training
- Phase 1 and 2 Training for 2010 Arizona ELA and Mathematics Standards (CCSS)
- Course Requirements for High School Mathematics increasing
- Teacher Cadres being formed to support educators
- Master Educator Development and Review Teams

# Arizona The Work is Underway



- PARCC Content Frameworks for ELA and Mathematics released in November 2011
- Arizona Common Core/PARCC Website re-launched in October 2011
- Higher Education Engagement
- Participation in PARCC Transition & Implementation Institutes for Stakeholder Engagement
- Participation in PARCC Operational Working Groups
- Arizona educators participate in PARCC content work

# **Professional Development...**



### **3-Phase Approach:**

#### 1. Phase 1: Awareness

- Standards
- 2 day ELA, 1 day Math, 1 day administrator trainings, TOT for ELA and Math, web-based course modules

#### 2. Phase 2: Transition and Implementation

- Instructional Shifts and Content
- What does implementation look like in the classroom? Model curriculum, instructional units, lesson plans, video models, master teacher development teams

#### 3. Phase 3: Instructional Integration and Analysis

- STEM Integration and Data Analysis
- Integration across content, STEM integration, data analysis and classroombased assessments

#### **Technical Assistance Trainings**

- Ongoing
- Rigor, math and ELA specific, PARCC assessment overview

### **Currently Planned Support...**



- Webinars
- Increased number of web-based courses
- Expansion of TOT Cadre to increase regional representation
- Master Educator Development and Review Teams
- Repository of resources based on work of development teams
- Implementation Self-Assessment tool for LEAs
- PARCC item tasks and prototypes Summer 2012
- Video resources.

### This is not "business as usual"



- Opportunity to make a significant difference in the lives of students
- A seismic change for Arizona's educational landscape
- Requires "all hands on deck"
- Not just another standards implementation...
  this will change the way teachers address their
  content... and how knowledge is assessed.

### 6 Instructional Shifts in ELA

Chift 1	DK 5 - Ralancina Informational and Liter

complex text)

**Balancing Informational and Literary Text** (50% informational text – science and social studies emphasis)

Shift 2 6-12 - Building Knowledge in the Disciplines (Content teachers outside ELA emphasize literacy experiences) Shift 3 Staircase of Complexity (Grade-appropriate complex

text and knowing when and how much to scaffold for students) Shift 4 Text-based Answers (Conversations are dependent on a

common text. Teachers ask text-dependent questions and value evidence) Shift 5 Writing from Sources (Writing emphasizes use of evidence

to inform or make an argument) Shift 6 Academic Vocabulary (Building students' ability to access

### **Mathematical Practices**



#### Mathematically proficient students:

Make sense of problems and persevere in solving them

Reason abstractly and quantitatively

Construct viable arguments and critique the reasoning of others

Model with mathematics

Use appropriate tools strategically

Attend to precision

Look for and make use of structure

Look for and express regularity in repeated reasoning

## 6 Instructional Shifts in Math

**Coherence** (Learning is connected within and across grades –

Fluency (Speed and accuracy assists with understanding and

Deep Conceptual Understanding (More than just "how to

Shift 1	Focus (Narrowing and deepening the scope to build a strong

foundational knowledge)

standards are extensions of previous learning)

manipulation of more complex concepts)

**Applications** ("Real World" Application)

**Dual Intensity** (Practicing and Understanding)

get the answer")

Shift 2

Shift 3

Shift 4

Shift 5

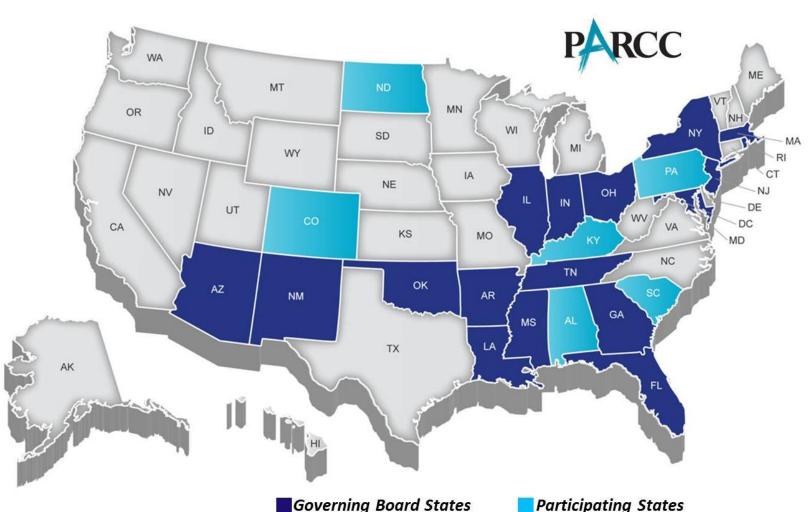
Shift 6



# ASSESSING COLLEGE AND CAREER READINESS...

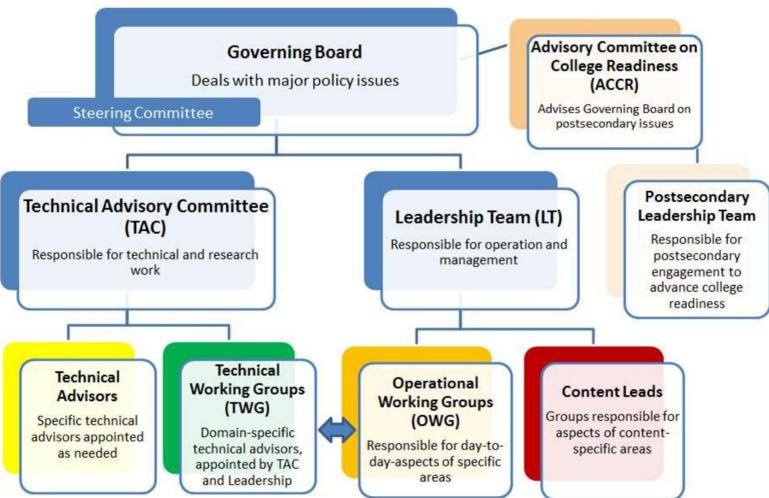
# Partnership for Assessment of Readiness for College and Careers (PARCC)





# PARCC Governance Structure





# **Arizona's Participation**



#### **Governing Board**

Superintendent John Huppenthal

#### Advisory Committee on College Readiness (ACCR)

Tom Anderes

#### **Leadership Team**

Roberta Alley

#### Postsecondary Leadership Team

Karen Nicodemus

#### **Educator Engagement**

Sarah Galetti

#### Operational Working Group(s) Participation

Content Frameworks/Fairness, Accessibility and Accommodations/Design/Research

#### **Assessment Design**

K-12 and higher education content specialists

#### **Transition & Implementation Institute**

12 member team of Arizona Education Leaders/Kathy Hrabluk

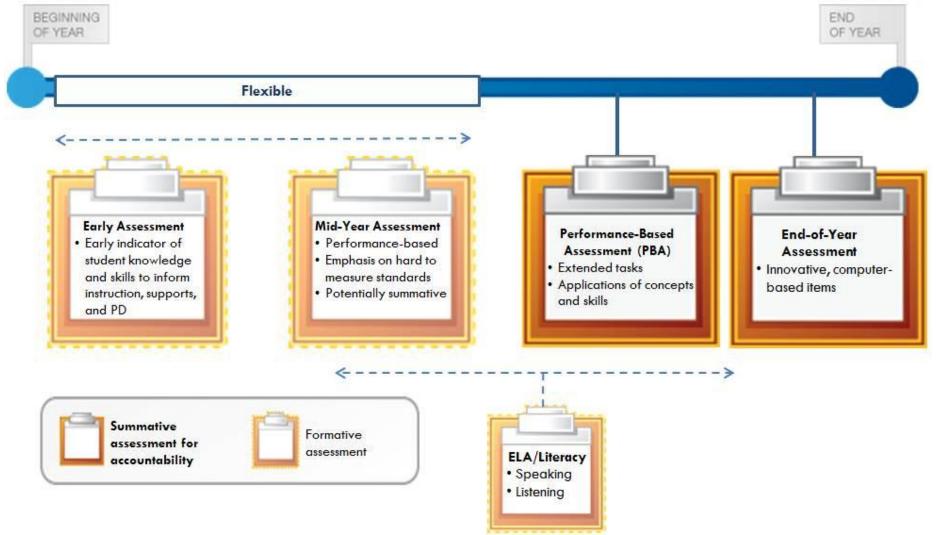
### **The PARCC Goals**



- 1. Create high-quality assessments
- 2. Build a pathway to college and career readiness for all students
- 3. Support educators in the classroom
- 4. Develop 21<sup>st</sup> century, technology-based assessments
- 5. Advance accountability at all levels

### Goal # 1: Create High-Quality Assessments





# Claims Driving Design: Mathematics



#### Students are on-track or ready for college and careers

Students solve problems involving the major content for their grade level with connections to practices

Students solve problems involving the additional and supporting content for their grade level with connections to practices

Students express
mathematical reasoning
by constructing
mathematical arguments
and critiques

Students solve real world problems engaging particularly in the modeling practice

Student demonstrate fluency in areas set forth in the Standards for Content in grades 3-6

# Claims Driving Design: ELA/Literacy



Students are on-track or ready for college and careers

Students read and comprehend a range of sufficiently complex texts independently

Students write effectively when using and/or analyzing sources.

Reading Literature Reading Informational Text Vocabulary Interpretation and Use

Written Expression

Conventions and Knowledge of Language Students
build and
present
knowledge
through
research
and the
integration,
comparison,
and
synthesis of
ideas.

### Goal #2: Build a Pathway to College and Career Readiness for All Students



K-2 formative
assessment
being
developed,
aligned to the
PARCC system

Timely student achievement data showing students, parents and educators whether ALL students are ontrack to college and career readiness

College
readiness score
to identify who
is ready for
college-level
coursework

Targeted interventions & supports:

- •12<sup>th</sup>-grade bridge courses
- PD for educators

K-2

3-8

High School SUCCESS IN FIRST-YEAR, CREDIT-BEARING, POSTSECONDARY COURSEWORK

ONGOING STUDENT SUPPORTS/INTERVENTIONS

### Goal #3: Support Educators in the Classroom



INSTRUCTIONAL TOOLS TO SUPPORT IMPLEMENTATION

PROFESSIONAL DEVELOPMENT MODULES

**K-12 Educator** 

TIMELY STUDENT ACHIEVEMENT DATA

EDUCATOR-LED TRAINING TO SUPPORT "PEER-TO-PEER" TRAINING

## **Teacher Involvement in PARCC**



- Engaged as reviewers on local educator teams and teams that review potential test questions for bias and sensitivity issues.
  - Tasked with ensuring that items are free of bias, and are culturally sensitive, age-appropriate, content accurate, and well-aligned to the CCSS.
- Development of a number of resources for states and districts to use in the implementation of the CCSS and PARCC assessments including:
  - PARCC Model Content Frameworks
  - Model instructional units
  - Educator Leader Cadres
  - Diagnostic assessments
  - Professional development modules
  - College-ready tools
  - PARCC item and task prototypes

### Goal #4: Develop 21<sup>st</sup> Century, Technology-Based Assessments



# PARCC's assessment will be computer-based and leverage technology in a range of ways.

#### Item Development

Develop innovative tasks that engage students in the assessment process

#### **Administration**

- Reduce paperwork, increase security, reduce shipping/receiving & storage
- Increase access to and provision of accommodations for SWDs and ELLs

#### Scoring

Make scoring more efficient by combining human and automated approaches

#### Reporting

• Produce timely reports of students' performance throughout the year to inform instruction, interventions, and professional development

### **Technology Readiness**



- Technology Readiness Survey: will be distributed in early April to all LEAs — a school level survey on readiness to participate in a technology-based assessment.
- Grades 3-5: deliver the assessments via computer, but have students respond to the assessment questions on paper and pencil (potential concerns about younger students' keyboarding abilities). Before making a final determination about grades 3-5, research will be conducted to confirm the appropriate approach.
- Grades 6-12: administered and scored via computer

# Goal #5: Advance Accountability at All Levels



PARCC assessments will be purposefully designed to generate valid, reliable and timely data, including measures of growth, for various accountability uses.

- School and district effectiveness
- Educator effectiveness
- Student placement into college, credit-bearing courses
- Comparisons with other state and international benchmarks
- PARCC assessments will be designed for other accountability uses as states deem appropriate

### **PARCC Timeline**



SY 2010-11

Launch and design phase

SY 2011-12

Development begins

SY 2012-13

First year
pilot/field
testing and
related research
and data
collection

SY 2013-14

Second year
pilot/field
testing and
related research
and data
collection

SY 2014-15

Full administration of PARCC assessments Summer 2015

Set
achievement
levels,
including
college-ready
performance
levels

# National Center and State Collaborative (NCSC)



- Assessment consortium for the development of an assessment for student with a significant cognitive disability
- Will replace AIMS A
- Nineteen states are in the consortium
- Similar support structure for educators as in PARCC
- Collaboration between PARCC and NCSC

# National Center and State Collaborative (NCSC)



BEGINNING OF YEAR END OF YEAR



**DIGITAL LIBRARY** of curriculum, instruction, and classroom assessment resources; online professional development modules and support materials for state-level educator Communities of Practice to support teachers with the resources they need to improve student outcomes; guidelines for IEP teams to use in student participation decision making; training modules for assessment administration and interpretation of results; online assessment delivery, administration, and reporting.



**COMMUNITIES OF PRACTICE** established in each state to support teacher training and use of the curriculum, instruction, and assessment resources. Resources will be available for use in all schools and districts, as locally determined.





Curriculum, instruction, and formative assessment resources for classroom use





Summative assessment for accountability

<sup>\*</sup> Alternate assessment systems are those developed for students with the most significant cognitive disabilities and are based on alternate achievement standards.



# HIGHER EDUCATION'S COMMITMENT...

### **Higher Education Engagement**



- Collaborate on design parameters
- Identify college-ready core competencies in ELA and mathematics in the CCSS
- Develop college ready cut scores based upon research and validation
- Create better alignment of high school curricula with first-year college courses
- Develop "bridge courses" and explore dual enrollment policies
- Target college readiness supports to help students transition from high school to postsecondary

# Challenges Ahead for Higher Education

- Identifying a set of core competencies in English and mathematics (CCSS) that signal a student is on-track to be college-ready
- Agreeing on college-readiness standards acceptable across higher education sectors and states
- Communicating clear placement standards
- Helping students use their senior year more effectively
- Helping teachers prepare to teach to the new standards and assessments
- Connecting current initiatives in states regarding college preparation, access, and completion



# WHAT IS ARIZONA DOING NOW...

## Changes in AIMS....



- Text complexity for newly commissioned passages has increased on AIMS.
- AIMS has increased the Depth of Knowledge (DOK) for newly written field-test items.
- The number of informational texts on AIMS has increased to align with new expectations.
- Indentify key concepts not in College Career Ready Standards that will be tested on AIMS in 2013 and 2014

# Key Challenges for Arizona One Voice for Change



## Technical Challenges

 Transitioning to a computer-based assessment system

## Communication Challenges

- Student expectations
- Parent Engagement
- Multiple Stakeholders
- Common Message

## Implementation Challenges

- Transitioning to the new standards and assessments at the classroom level
- Transitioning the High School Competency Exam system
- Significant Shift in Instructional Focus
- Higher Education
   Engagement
- Budgetary planning

## Policy Challenges

- Accountability
  - Break in Trend
  - Multiple Uses
- College admissions/ placement
- Use of NRT
- Perceptions about what these assessments can do

#### What can I do?



#### If you are ....

- an educator
- a parent
- a business leader
- in higher education
- a policy maker

## You can support Arizona students by....

- Forwarding the message of the Arizona 2010 English Language Arts and Mathematics Standards
- Implementing the 2010 Standards
- Sharing strategies for new instructional focus and rigor
- Sharing with parents new expectations
- Raising expectations for students
- Reading and talking about complex text with student(s)
- Sharing how you use mathematics daily
- Supporting a local school
- Tutoring or sharing your skills and knowledge
- Sharing what you expect from high school graduates who enter work force
- Sharing your expectations for students enrolled in credit-bearing classes

### Where to Begin...



#### Messaging:

 To teachers, to parent groups/associations, and to local communities

#### Build Knowledge and Capacity:

- ADE professional development
- TOT cadres
- Development teams
- Begin the work dive into the standards

#### The 6 Instructional Shifts:

- In ELA and Math
- Focus deeply with follow up
- Increase expectations
- Decrease scaffolding; increase independence

### Closing thoughts...



 We are partners in this initiative. Reach out to ADE and let us know what you need, and how we can help you to be successful.

- Let ADE know about the great things that are happening. We would love to have examples of success to highlight and share with others.
  - Master teachers and leaders
  - Successful schools, districts, and charters
  - Materials and resources you are willing to share

#### Websites of Interest....



- http://www.azed.gov
  - Updated information, links, and resources for implementation and transition to the 2010 standards and PARCC assessment.
- http://www.azed.gov/standards-development-assessment/parccassessment/
  - Arizona Department of Education's webpage for PARCC assessment information.
- http://www.achieve.org/
   Achieve website. Achieve is the project management partner for PARCC.
- http://www.parcconline.org/
   PARCC website. PARCC is the assessment consortium that Arizona is part of. Arizona is a governing state within the consortium.
- www.achievethecore.org

#### More websites of interest....



- http://www.corestandards.org/
  - This site will give you background and additional information about the standards. Much of this same information can be found on the Arizona Department of Education website.
- http://www.ccsso.org/
  - Council of Chief State School Officers website. Excellent link to Hunt Institute and CCSSO Common Core Implementation Video Series.
- http://usny.nysed.gov/rttt/resources/bringing-the-common-core-to-lifedownload.html
- http://www.youtube.com/user/TheHuntInstitute#g/u
- http://www.cehd.umn.edu/NCEO/
  - Here you will find the NCEO briefs and additional information related to assessing our current AIMS-A students (1%).